

METHOD FOR CONTROLLING ROTATION SPEED OF AN OPTICAL STORAGE DEVICE

Abstract

A method of rotation speed control for optical storage device is proposed. The method adjusts the rotation speed of an optical storage device to increase access probability and also enhance performance of the optical storage device. The method includes providing weighted values corresponding to a plurality of events that may happen during reading or writing processes of the optical storage device, providing an evaluation function, and determining a speed-up threshold and a speed-down threshold, which correspond to each rotation speed value, within a range of evaluation function values. Further included are when an event of the plurality of events happens, changing the evaluation function value according to the weighted value of the event, and when the evaluation function value is not within an domain between the thresholds, selectively changing the rotation speed of the optical storage device. The method further includes adaptively adjusting the thresholds and the weighted values.